

Title (en)
PLANAR TRANSFORMER AND RELATED DEVICE

Title (de)
PLANARTRANSFORMATOR UND ZUGEHÖRIGE VORRICHTUNG

Title (fr)
TRANSFORMATEUR PLANAIRE ET DISPOSITIF ASSOCIÉ

Publication
EP 4310871 A1 20240124 (EN)

Application
EP 21936386 A 20210414

Priority
CN 2021087201 W 20210414

Abstract (en)
This application provides a planar transformer and a related device. The planar transformer includes a magnetic core. The magnetic core includes a first magnetic core cover, a second magnetic core cover, n first magnetic core pillars, and k second magnetic core pillars, the n first magnetic core pillars and the k second magnetic core pillars are disposed between the first magnetic core cover and the second magnetic core cover, and n and k each are an integer greater than 0. A primary-side winding and a secondary-side winding that are coupled to each other are disposed on each of the n first magnetic core pillars, and an auxiliary inductor winding is disposed on each of the k second magnetic core pillars. When power is supplied, a first magnetic flux cancels a part of a second magnetic flux when passing through the first magnetic core cover and the second magnetic core cover, the first magnetic flux is a magnetic flux generated by auxiliary inductor windings disposed on the k second magnetic core pillars, and the second magnetic flux is a magnetic flux generated by primary-side windings disposed on the n first magnetic core pillars. The planar transformer provided in this application becomes thinner.

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CPC (source: EP US)
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KH MA MD TN

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